# Module 7: Supervised Learning-1

Case Study

# edureka!



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## Case Study

### **Objective:**

- Learn to handle missing values
- Learn to fit a decision tree and compare its accuracy with random forest classifier.

#### **Questions:**

1. Let's attempt to predict the survival of a horse based on various observed medical conditions. Load the data from 'horses.csv' and observe whether it contains missing values.

[Hint: Pandas dataframe has a method isnull]

2. This dataset contains many categorical features, replace them with label encoding.

[Hint: Refer to get\_dummies methods in pandas dataframe or Label encoder in scikit-learn]

- 3. Replace the missing values by the most frequent value in each column. [Hint: Refer to Imputer class in Scikit learn preprocessing module]
- 4. Fit a decision tree classifier and observe the accuracy.
- 5. Fit a random forest classifier and observe the accuracy.